

| NAME             | POSITION TITLE             |
|------------------|----------------------------|
| TAMAS TOROK (PI) | Staff scientist, ESD, LBNL |

### Education/Training

| INSTITUTION(S) and LOCATION             | DEGREE(s)               | YEAR(S) | FIELD(S) OF STUDY |
|---|-------------------------|---------|-------------------|
| Humboldt University, Berlin, Germany    | B.S.                    | 1969    | Food Sciences     |
| Humboldt University, Berlin, Germany    | M.S.                    | 1971    | Food Sciences     |
| University of Szeged, Hungary           | Ph.D                    | 1982    | Microbiology      |
| Technical University, Budapest, Hungary | M.S. (2 <sup>nd</sup> ) | 1984    | Bioengineering    |

### Research and Professional Experience

2010 - present Staff scientist, Earth Sciences Division, Ecology Department, Lawrence Berkeley National Laboratory (LBNL)

1997 - 2010 Staff scientist, Life Sciences Division, LBNL

1995 -1997 Scientist, Life Sciences Division, LBNL

1992 - 1995 Senior research associate, Life Sciences Division, LBNL

1988 - 1992 Visiting scientist, USDA Western Regional Research Center, Albany, CA

1974 - 1988 Senior staff scientist, Department of Microbiology, Corvinus University, Budapest, Hungary

1971 - 1974 Microbiologist, Center for Food Control and Analysis, Budapest, Hungary

### Awards, Memberships, and Volunteering

"Outstanding Performance Award" - LBNL (2010)

"Excellence in Technology Transfer Award" - LBNL (2007)

"Outstanding Mentor Award" - US Department of Energy (2004)

"Outstanding Performance Award" - LBNL (1996)

American Society for Microbiology

Volunteer for Citizens Development Corps (CDC) [assignment in Kosovo in 2002]

### Selected Publications and Patents

**Torok, T.**, R. K. Mortimer, P. Romano, G. Suzzi, and M. Polsinelli. 1996. Quest for wine yeasts - An old story revisited. J. Ind. Microbiol. 17:303-313.

Repin, V. E., **T. Torok**, and M. I. Kuzmin, 2001. The biodiversity of microorganisms from bottom sediments of Lake Baikal by evidence from deep boreholes. Russian Geol. Geophys., 42:231-234.

Andreeva, L.S., M.V. Repina, S.F. Oreshkova, E.I. Ryabchikova, L.I. Puchkova, N.N. Blinova, M.V. Repina, N.I. Pechurkina, **T. Torok**, and V.E. Repin 2005. Genomic and phenotypic analysis of microorganisms isolated from the sediments of Lake Baikal. Microbiology 74:709-714.

Andreeva, L.S., N.I. Pechurkina, O.V. Morozova, E.I. Ryabchikova, S.I. Belikov, L.I. Puchkova, E.K. Emelyanova, **T. Torok**, and V.E. Repin 2007. *Roseomonas baikalica* sp. nov., a new bacterial species isolated from core samples collected by deep-hole drilling at the bottom of Lake Baikal. Microbiology 76:1-8.

Baker, S.E., Thykaer, J., Adney, W.S., Brettin, T.S., Brockman, F.J., D'Haeseleer, P., Martinez, A.D.,

Miller, R.M., Rokhsar, D.S., Schadt, C.W., **Torok, T.**, Tuskan, G., Bennett, J., Berka, R.M., Briggs, S.P., heitman, J., Taylor, J., Gillian-Turgeon, B., Werner-Washburne, M., and Himmel, M.E. 2008. Fungal genome sequencing and bioenergy. *Fungal Biol.Rev.*, 30:1-5.

Thrash, J.C., Pollock, J., **Torok, T.**, and Coates, J.D. 2009. Description of the novel perchlorate-reducing bacteria *Dechlorobacter hydrogenophilus* gen. nov., sp. nov. and *Propionivibrio militaris* sp. nov. *Appl Microbiol Biotechnol.* 86:335-343.

Thrash, J.C., Ahmadi, S., **Torok, T.**, Coates, J.D. 2010. *Magnetospirillum bellicus* sp. nov., a novel dissimilatory perchlorate-reducing bacterium in the alphaproteobacteria isolated from a bioelectrical reactor. *Appl. Environ. Microbiol.*, 2010 May 21 (Epub ahead of print).

**European patents:** EP1763536(B1) and EP2230247(A2)

**US patents:** US7306946; US7589176(B2); US7598346(B1); US7700832; US7772370(B2); US7825294(B2); and US20100031391(A1)

## Synergistic Activities

**1995 – 2000** Associate Administrator, Center for Environmental Biotechnology, LBNL

**1996 – present** Member of the Editorial Board for the *Journal of Industrial Microbiology and Biotechnology*; reviewer for the journals *Enzyme and Microbial Technology*, *Journal of Histochemistry and Cytochemistry*, *Aerobiology*, *Astrobiology*, and the *ISME Journal*

**1997 - present** Contributed to or led a variety of projects with regard to microbial diversity, including fate and transport of DNAPLs in fractured rocks; ancient microorganisms isolated from amber; the use of spore protein signature information for the detection of *Bacillus anthracis*; high-throughput screening of plant and microbial extracts for a new class of antibiotics; development of methods for DNA extraction of bacterial endospores; isolation of unique microorganisms and characterization of extremophilic microbial communities from Lake Baikal and Kamchatka in Siberia, Russia, the Caucasus region (Armenia, Azerbaijan, and Georgia); extremely high radiation surviving filamentous fungi from the Chernobyl Exclusion Zone in Ukraine; *B. anthracis* genotyping in Tajikistan; ultrahigh-throughput genotyping of *Salmonella typhi*, *Yersinia pestis* and *Francisella tularensis*; microbial diversity-based novel crop protection and other biotech products; the DOE-GTL project on protein complexes characterization (PCAP); food safety and probiotics and human health;

Advised undergraduate students (Biotech Partners [formerly Berkeley Biotechnology Education, Inc.] co-op students, and UC Berkeley work-study students) and graduate students (CSU East Bay and Jackson State University, MS), and mentored students and exchange faculty underrepresented in science (Bioremediation Education, Science, and Technology program [DoD], Science Undergraduate Laboratory Internship program [DOE], Faculty and Student Training program [DOE], and Mickey Leland Fellow program [DOE])

**2000 – present** Part-time instructor of microbiology and immunology (California State University East Bay, Hayward, CA); adjunct faculty at Cañada College in Redwood City, CA

**2000 – 2009** Chair, Institutional Biosafety Committee (IBC) at LBNL

**2005 – present** Microbiology expert of the IBC at Los Alamos National Laboratory and USDA Western Regional Research Center

**2009 – present** Program manager for DOE's Global Initiatives for Proliferation Prevention (GIPP) program at Berkeley Lab; chair for the GIPP program chem/bio review panel; US expert representative Steering Committee member for three International Science and Technology Center (ISTC) Targeted Initiatives